Supreme Court, U.S.
FILED
JAN 3 1985
OFFICE OF THE CLERK

No. 105, Original

In the Supreme Court of the United States

OCTOBER TERM, 1994

STATE OF KANSAS, PLAINTIFF

v.

STATE OF COLORADO

ON EXCEPTIONS TO THE REPORT OF THE SPECIAL MASTER

BRIEF FOR THE UNITED STATES IN RESPONSE TO THE EXCEPTIONS OF KANSAS AND COLORADO

DREW S. DAYS, III
Solicitor General

LOIS J. SCHIFFER
Assistant Attorney General

EDWIN S. KNEEDLER
Deputy Solicitor General

JEFFREY P. MINEAR
Assistant to the Solicitor General

JAMES J. DUBOIS
PATRICIA L. WEISS
Attorneys

Department of Justice
Washington, D.C. 20530
(202) 514-2217

QUESTION PRESENTED

The United States will address the following issues:

1. Whether Kansas may prove a violation of the Arkansas River Compact by demonstrating that Colorado violated the operating principles for Trinidad Reservoir (Kansas Exception No. 1).

2. Whether Kansas adequately proved that Colorado's administration of the Winter Water Storage Program resulted in a material depletion of usable flows at the Colorado-Kansas Stateline (Kansas Exception No. 2).

3. Whether the Special Master selected an appropriate method for calculating "usable" depletions (Kansas Exception No. 3).

4. Whether a heightened standard of proof and equitable principles, such as the doctrine of laches, are applicable in a Compact enforcement action (Colorado Exception Nos. 1 and 4).

TABLE OF CONTENTS

	Page
Statement	1
1. The Arkansas River Basin	2
2. The Arkansas River Compact	3
3. The Current Proceedings	7
Introduction and summary of argument	13
Argument:	
A. The Special Master correctly concluded that Kansas failed to establish that Colorado's departures from the Trinidad Reservoir operating principles constitute a violation of the Arkansas River Compact	16
B. The Special Master correctly concluded that Kansas failed to prove that the Winter Water Storage Program violates the Compact	21
C. The Special Master selected an appropriate method for calculating usable depletions	27
D. The Court should apply the principles established in its equitable apportionment cases to the standard of proof and laches issues in this case	32
Conclusion	36

TABLE OF AUTHORITIES

Cases:

Alabama v. *Arizona*, 291 U.S. 286 (1934)	35
Colorado v. *Kansas*, 320 U.S. 383 (1943)	3, 4, 23, 29, 36
Colorado v. *New Mexico*:	
459 U.S. 176 (1982)	23, 32, 33
467 U.S. 310 (1984)	15, 22, 33, 34, 35
Connecticut v. *Massachusetts*, 282 U.S. 660 (1931)	33, 35
Green v. *Bock Laundry Mach. Co.*, 490 U.S. 504 (1989)	23
Idaho ex rel. Evans v. *Oregon*, 462 U.S. 1017 (1983)	32

Cases—Continued: Page

Kansas v. *Colorado*:
206 U.S. 46 (1907) 3, 4, 23
475 U.S. 1079 (1986) 1
478 U.S. 1018 (1987) 1
Mississippi v. *Arkansas*, 415 U.S. 289 (1974) 22
Nebraska v. *Wyoming*, 113 S. Ct. 1689 (1993) 21, 32, 33, 34, 35,36
Ohio v. *Kentucky*, 410 U.S. 641 (1973) 36
Texas v. *New Mexico*:
462 U.S. 554 (1983) 19, 20, 21, 23
482 U.S. 124 (1987) 36
United States v. *Montalvo-Murillo*, 495 U.S. 711 (1990) .. 19
Wyoming v. *Colorado*, 309 U.S. 572 (1940) 32

Statutes and rules:

Act of Aug. 16, 1962, Pub. L. No. 87-590, 76 Stat. 389 8
Arkansas River Compact, Act of May 31, 1949, ch. 155, 63 Stat. 145 ..... 1, 4
Pecos River Compact, Act of June 9, 1949, ch. 184, 63 Stat. 159 19
Fed. R. Civ. P. 53(e)(2) 22
Sup. Ct. R. 17.2 22

In the Supreme Court of the United States

OCTOBER TERM, 1994

No. 105, Original

STATE OF KANSAS, PLAINTIFF

v.

STATE OF COLORADO

ON EXCEPTIONS TO THE REPORT OF THE SPECIAL MASTER

BRIEF FOR THE UNITED STATES IN RESPONSE TO THE EXCEPTIONS OF KANSAS AND COLORADO

STATEMENT

In 1985, the State of Kansas brought this original action against the State of Colorado to resolve disputes under the Arkansas River Compact, Act of May 31, 1949, ch. 155, 63 Stat. 145. This Court granted Kansas leave to file its complaint, *Kansas* v. *Colorado*, 475 U.S. 1079 (1986), and the Court appointed the Honorable Wade H. McCree, Jr., to serve as the Special Master. 478 U.S. 1018 (1986). Upon Judge McCree's death, the Court appointed Arthur L. Littleworth as the Special Master. 484 U.S. 910 (1987). Special Master Littleworth supervised pretrial proceedings, granting the United States' unopposed motion to intervene, and allowing certain amendments to the pleadings. He entered preliminary

rulings, held a liability trial on Kansas's claims, and prepared a report. On October 3, 1994, this Court received the Special Master's report on the liability phase of the case and invited the parties to file exceptions. 115 S. Ct. 48 (1994).[1]

1. The Arkansas River Basin

The Arkansas River originates on the eastern slope of the Rocky Mountains in central Colorado and flows south and then east across Colorado and into Kansas. It receives significant in-flows from the Purgatoire River, its major tributary in Colorado, which originates in the Sangre de Cristo mountains in southern Colorado near the New Mexico border. The Purgatoire River flows in a northeasterly direction to join the Arkansas River about 60 miles west of the Kansas border at Las Animas, Colorado. See 1 Rep. 35-40, 50-57. See Pocket Map (contained in 1 Rep.).

The United States has constructed three relevant water storage projects on this river system. The John Martin Reservoir, located immediately east of the juncture of the Purgatoire and Arkansas Rivers in Colorado, is operated by the Army Corps of Engineers to control floods and to provide storage water in accordance with the Arkansas River Compact. It has a storage capacity of approximately 618,000 acre-feet. 1 Rep. 45-48. The Pueblo Reservoir, located on the Arkansas River about 150 miles upstream of the Kansas border near Pueblo, Colorado, is managed by the Department of the Interior's Bureau of Reclamation as part of the Fryingpan-Arkansas Project. It has a storage capacity of approximately 358,000 acre-feet. 1 Rep. 43-44. The

[1] The Special Master's report consists of three volumes (cited as _ Rep. ___) and a bound appendix (cited as Rep. App. __).

Trinidad Reservoir, located on the Purgatoire River near Trinidad, Colorado, is jointly managed by the Army Corps of Engineers and the Bureau of Reclamation to control floods and to provide storage water for use by the Bureau of Reclamation's Trinidad Project. It has a storage capacity of approximately 114,000 acre-feet. 1 Rep. 43.

Twenty-three canal systems in Colorado divert water from the Arkansas River for irrigation. Fourteen of those systems are located upstream from John Martin Reservoir, and four of those systems have associated privately owned, off-channel, water storage facilities. Those facilities include Lake Henry and Lake Meredith, the Holbrook, Dye, Adobe Creek and Horse Creek Reservoirs, and the Great Plains Reservoir System. They were constructed before Colorado entered into the Arkansas River Compact and collectively have a storage capacity of about 800,000 acre-feet. Six canal systems in Kansas operate between the Colorado border and Garden City. A small associated reservoir, Lake McKinney, has a storage capacity of about 3600 acre-feet. See 1 Rep. 41-43.

2. The Arkansas River Compact

The Arkansas River Compact apportions the Arkansas River between the States of Kansas and Colorado. As the Special Master explains, the Compact was an outgrowth of two original actions that the States had filed in this Court disputing their respective entitlements to use of the Arkansas River. 1 Rep. 1-6. In each of those cases, the Court denied Kansas's request for an equitable apportionment. See *Colorado* v. *Kansas*, 320 U.S. 383, 391-392 (1943); *Kansas* v. *Colorado*, 206 U.S. 46, 114-117 (1907).

In the first suit, Kansas sought to enjoin water diversions in Colorado, but the Court denied relief on the ground that Colorado's depletions of the Arkansas River were insufficient at that time to warrant injunctive relief. *Kansas* v. *Colorado*, 206 U.S. at 114-117. In the second suit, Colorado sought to enjoin lower court litigation brought by Kansas water users against Colorado water users, while Kansas sought an equitable apportionment of the Arkansas River. The Court concluded that Colorado was entitled to the injunction it sought, but the Court concluded once again that Kansas had failed to show sufficient injury to warrant an equitable apportionment of the Arkansas River. *Colorado* v. *Kansas*, 320 U.S. at 391-392. See 1 Rep. 2-6.

In denying Kansas's second request for judicial relief, the Court suggested that a dispute such as this one calls for "expert administration rather than judicial imposition of a hard and fast rule," and that the controversy "may appropriately be composed by negotiation and agreement, pursuant to the compact clause of the federal Constitution." *Colorado* v. *Kansas*, 320 U.S. at 392. Shortly thereafter, the States appointed commissioners to negotiate an interstate agreement. In 1949, the States approved, and Congress ratified, the Arkansas River Compact, 63 Stat. 145. See generally 1 Rep. 5-6, 71-90, 91-108; Rep. App. 1-17 (reprinting text of Compact).

The Compact was intended to "[s]ettle existing disputes and remove causes of future controversy" between the States and their citizens over the use of the Arkansas River, and to

> [e]quitably divide and apportion between the States of Colorado and Kansas the waters of the Arkansas River and their utilization as well as the benefits arising from the construction, operation and maintenance by the United States of John Martin Reservoir Project for water conservation purposes.

Compact Art. I (Rep. App. 1-2). The Compact accomplishes those goals through two basic mechanisms.

First, the Compact protects the States' respective rights to continued use of the Arkansas River through a limitation on new depletions. Article IV-D of the Compact allows new development in the form of dams, reservoirs, and other water-utilization works in Colorado and Kansas, provided that the "waters of the Arkansas River" are not thereby "materially depleted in usable quantity or availability for use to the water users in Colorado and Kansas under this Compact." Rep. App. 5. The Compact defines the term "waters of the Arkansas River," Art. III-B (Rep. App. 2-3), but it does not expressly define what constitutes a "material" depletion or a "usable" quantity.[2]

Second, the Compact regulates the storage of water at John Martin Reservoir and specifies the criteria by which each State is entitled to call for water releases. Article V of the Compact, which provides the "basis of

---

[2] The full text of Article IV-D states as follows:

> D. This Compact is not intended to impede or prevent future beneficial development of the Arkansas River basin in Colorado and Kansas by Federal or State agencies, by private enterprise, or by combinations thereof, which may involve construction of dams, reservoir, and other works for the purposes of water utilization and control, as well as the improved or prolonged functioning of existing works: Provided, that the waters of the Arkansas River, as defined in Article III, shall not be materially depleted in usable quantity or availability for use to the water users in Colorado and Kansas under the Compact by such future development or construction. Rep. App. 5.

apportionment of the waters of the Arkansas River," prescribes the timing of storage at the reservoir and the release criteria. See Rep. App. 5-9. Basically, between November 1 and March 31, in-flows to the John Martin Reservoir are stored, subject to Colorado's right to demand a limited amount of water. Between April 1 and October 31, the storage of water is largely curtailed, and either State may call for releases at any time in accordance with the flow rates set out in the Compact.[3]

The Compact creates an interstate agency, the Arkansas River Compact Administration, to administer the Compact. Compact Art. VIII (Rep. App. 11-15). The Compact Administration consists of a non-voting

[3] During the April-to-October irrigation season, Colorado may generally demand releases of water equivalent to a flow of 500 cubic feet per second (cfs) and Kansas may request releases equivalent to a flow of between 500 cfs and 750 cfs. See Rep. App. 5-9; 1 Rep. 45-48. The Compact regulates only the release rates, and historically, each State attempted to maximize its volumetric share by requesting release at the maximum flow rate until all of the storage water was depleted, which typically occurred early in the irrigation season. See 1 Rep. 45-48. In 1980, the Compact's administrative body, the Arkansas River Compact Administration (see text *infra*), adopted a resolution, known as the 1980 Operating Plan (reprinted at Rep. App. 107-117) to provide for more efficient utilization of the storage water. See 1 Rep. 47-48; 2 Rep. 171-180. In essence, the Operating Plan established separate storage accounts for each State and allocated 40 percent of stored water to Kansas and 60 percent to various Colorado canals. In addition, the Plan allowed three Colorado canal companies to store water in John Martin Reservoir that they otherwise would store elsewhere. In exchange for that right, those Colorado canals allowed 35 percent of their stored water to be credited to a Kansas Transit Loss Account. By its terms, the 1980 Operating Plan can be terminated by either State. See 1 Rep. 47-48; Rep. App. 111, 114-117.

presiding officer designated by the President of the United States and three voting representatives from each State. It is empowered to adopt by-laws, rules, and regulations, prescribe procedures for the administration of the Compact, and perform functions to implement the Compact. See Arts. VIII-B and VIII-C (Rep. App. 11-12). Article VIII-H of the Compact directs that the Administration shall "promptly investigate[]" violations of the Compact and report its findings and recommendations to the appropriate state official. Rep. App. 15. That Article further states that it is "the intent of this Compact that enforcement of its terms shall be accomplished in general through the State agencies and officials charged with the administration of water rights." Rep. App. 15.

3. The Current Proceedings

Kansas brought this action in 1985 to enforce the provisions of the Arkansas River Compact. In the course of pretrial proceedings, the Special Master narrowed the dispute to three alleged violations of the Compact arising from: (a) groundwater pumping in Colorado; (b) the Winter Water Storage Program (WWSP) at Pueblo Reservoir; and (c) the operation of Trinidad Reservoir. 1 Rep. 58. See also 1 Rep. 15-34 (describing procedural history of the case).[4]

a. Kansas's First Amended Complaint alleged that Colorado had violated the Arkansas River Compact by failing to allow the Compact Administration to investigate the impact of groundwater pumping on

[4] In response to Kansas's complaint, Colorado filed counterclaims challenging well pumping in Kansas and storage of releases from John Martin Reservoir into Lake McKinney. The Special Master has recommended dismissal of Colorado's counterclaims, and Colorado has not excepted to that recommendation. See 1 Rep. 58; 3 Rep. 436-459; Colo. Excepts. 1-2.

Arkansas River flow at the Colorado-Kansas Stateline. First Amended Compl. para. 12 (Rep. App. 23-24). At trial, Kansas altered its theory and produced evidence that post-Compact increases in groundwater pumping in Colorado had caused a substantial decline in the Arkansas River's surface flow. The Special Master evaluated that evidence and concluded that post-Compact groundwater pumping in Colorado had "materially depleted" the "usable" flow at the Stateline, in violation of Compact Article IV-D (Rep. App. 5). See 2 Rep. 263. He rejected Colorado's defenses that Kansas's claim should be barred under the equitable doctrines of laches, estoppel, waiver, and unclean hands. See 1 Rep. 169-170. The Special Master recommended that, if the Court agreed with his liability determination, the Court should remand the case to him for a determination of the appropriate remedy. 2 Rep. 263.

b. The WWSP was conceived by the Bureau of Reclamation and Colorado to obtain additional benefits from the Bureau's Fryingpan-Arkansas Project. That Project, which Congress authorized in 1962, Pub. L. No. 87-590, 76 Stat. 389, consists of a system of reservoirs and other facilities that transport water from the Colorado River Basin, west of the Continental Divide, to the more populated areas in the Arkansas River Basin, east of the Continental Divide. The Project's facilities, which were substantially completed in 1975, include a storage reservoir and water collection system on the west side of the Continental Divide, a tunnel for transporting water across the Divide, and three water storage facilities on the east side of the Continental Divide. Pueblo Reservoir is the largest of the eastern water storage facilities. The "imported" water stored there provides irrigation flows for lands served by the

Fryingpan-Arkansas Project, including lands within the Southeastern Colorado Conservancy District. That water is also utilized for power generation and for municipal and industrial uses. See 1 Rep. 43-44; 2 Rep. 306-307.

In 1964, the Bureau of Reclamation and Colorado began planning a program to utilize excess capacity at Pueblo Reservoir to store a portion of the winter-time flow of the Arkansas River. Prior to Pueblo Reservoir's construction, that winter-time flow was used by Colorado irrigators either to inundate uncultivated cropland (a process known as "winter irrigation") or for storage in privately owned, off-channel reservoirs. Under the WWSP, which commenced in 1976, most of the winter flow that was previously used for "winter irrigation" is stored in Pueblo and John Martin Reservoirs, as well as private reservoirs, for distribution to irrigators during the irrigation season. 2 Rep. 307-311.

Kansas initially challenged the WWSP as a "unilateral rejection of the Arkansas River Compact Administration's Resolution of July 24, 1951, requiring that any reregulation of the native water of the Arkansas River be approved by the Compact Administration." First Amended Compl. para. 12 (Rep. App. 24). See 2 Rep. 306. The Special Master partially resolved that claim against Kansas by recommending that the Court grant Colorado's motion for summary judgment that the Compact does not require Administration approval of the WWSP. See 2 Rep. 306. The Special Master reserved for trial "the issue of whether Stateline flows had actually been materially depleted by the WWSP in violation of the compact." 2 Rep. 306. Based on the evidence adduced at trial, the Special Master concluded that "Kansas has not proved that the WWSP has caused material Stateline

depletions." 2 Rep. 335. The Special Master determined that "the depletions shown by the Kansas model are well within the model's range of error" and that "[o]ne cannot be sure whether impact or error is being shown." 2 Rep. 334-335. The Special Master observed that "Kansas' case has not been helped by its own contradictions in quantifying impacts to usable flow." 2 Rep. 335.

c. Trinidad Reservoir was constructed by the Army Corps of Engineers in 1977, but it is jointly managed by the Corps for flood control and by the Bureau of Reclamation for irrigation and for conservation storage of winter flow. 1 Rep. 43; 3 Rep. 382-390. Before Trinidad Reservoir was constructed, the Bureau of Reclamation had prepared operating principles that, among other things, restricted conservation storage in the Reservoir to a maximum of 20,000 acre-feet. See 3 Rep. 388-390. The operating principles were approved by the Corps of Engineers and the Colorado Water Conservation Board, and were included in the February 1967 repayment contract between the Bureau and the local Purgatoire Water Conservancy District. 3 Rep. 390-391, 414. The Bureau also submitted the operating principles to the State of Kansas, which approved them, subject to certain amendments, and to the Compact Administration, which adopted a motion approving them in their amended form. 3 Rep. 390-395.

From 1979 to 1984, Colorado's Division 2 Water Engineer allowed the Purgatoire River Water Conservancy District, which had effective control over the Trinidad Reservoir's conservation pool, to make certain "accounting transfers" that, Kansas alleged, violated the operating principles. 3 Rep. 396. In 1988, at the request of the Compact Administration, the Bureau of Reclamation conducted a study of operations at Trinidad

Reservoir and concluded that two storage accounting practices at the Reservoir constituted a "departure from the intent of the operating principles." 3 Rep. 397.[5] Thereafter, in 1989, the Colorado Engineer directed that those practices be curtailed. 3 Rep. 405. The Special Master concluded that "[i]t appears that this directive is currently being followed, although a state action has been filed to amend relevant water rights decrees." 3 Rep. 406.

As the Special Master explained, Kansas's current theory respecting the Trinidad Project "is not apparent from the face of the complaint." 3 Rep. 407. Kansas asserted in its 1989 Amended Complaint (Rep. App. 23-24) that Colorado had violated the Compact by rejecting Kansas's requests for a Compact investigation into Colorado's accounting practices. 3 Rep. 407. At other times in the litigation, however, Kansas seemed to suggest that the Trinidad Project had caused a material depletion in Stateline flows, in violation of Article IV-D of the Arkansas River Compact (Rep. App. 5). See 3 Rep. 407-408. By the time of trial, Kansas "presented quite a different legal concept." 3 Rep. 408. Kansas argued that a "departure from the Operating Principles is a violation of the Compact, regardless of injury." 3 Rep. 408.

---

[5] The Bureau found that the Colorado accounting practices at issue were "contrary to the assumptions" of the operating principles because they allowed the Trinidad Reservoir to store irrigation water in excess of 20,000 acre-feet. The Bureau specifically identified the Colorado Engineer's practices of: (1) allowing storage of winter flows without counting them against the 20,000 acre-feet storage limit; and (2) allowing water remaining in the conservation account at year's end to be transferred to another account so that a full 20,000 acre-feet could be stored in the following year. 3 Rep. 396-397, 399-406.

Kansas sought to prove a violation of the Compact under that theory by relying on evidence "comparing the flows into John Martin Reservoir 'as they would have occurred under the Operating Principles with the flows that occurred under actual operations.'" 3 Rep. 409.[6]

The Special Master received that evidence, but concluded that Kansas's Trinidad Reservoir claim should be dismissed. He explained that Article IV-D of the Compact (Rep. App. 5) allows construction of new reservoirs in Colorado "provided the flows of the Arkansas River are not materially depleted in usable quantity or availability for use in Kansas." 3 Rep. 424. The Special Master therefore determined that Article IV-D furnishes the Compact mechanism for challenging Trinidad Reservoir operations. He stated that while the Trinidad Reservoir operating principles were intended to prevent a "material depletion," a failure to adhere to the principles does not in itself "establish a Compact violation." 3 Rep. 426. Instead, a Compact claim must be based on "the actual operation of the Project" and "whether such operation has caused a material depletion." 3 Rep. 426. The Special Master concluded that Kansas had failed to show that the Trinidad Project had caused "a material depletion within the meaning of Article IV-D." 3 Rep. 431.

---

[6] Kansas's theory may have reflected the State's own doubts whether it could prove that the Trinidad Reservoir operations "materially depleted" Stateline flows in violation of Article IV-D. The Bureau's study (see note, 5, *supra*) suggested that even when the Trinidad Reservoir was operated in violation of the operating principles, it produced greater in-flow to John Martin Reservoir than if the Trinidad Project had not been in place. 3 Rep. 399-401; see also 3 Rep. 426-428.

In reaching that conclusion, the Special Master rejected Kansas's argument that the Compact Administration's adoption of a motion approving the operating principles was a "proper exercise of authority under Article VIII-B of the Compact" that was "binding upon Colorado." 3 Rep. 412. Article VIII-B empowers the Compact Administration to adopt "rules and regulations," prescribe "procedures for the administration of [the] Compact," and perform other "proper functions." Rep. App. 11. The Special Master examined the record and concluded that the Compact Administration "did not do, nor intend to do, what Kansas now claims." 3 Rep. 414. In particular, he found "nothing to indicate that the Compact representatives of either State thought they were exercising binding authority under Article VIII-B." 3 Rep. 415.

INTRODUCTION AND SUMMARY OF ARGUMENT

The State of Kansas brought this action to enforce its rights under the Arkansas River Compact, which apportions the flow of the Arkansas River between Kansas and Colorado. The Special Master has prepared a thorough report providing his recommendations on Kansas's three central claims and Colorado's two counterclaims. 2 Rep. 336-337. Kansas and Colorado have each filed exceptions to the Special Master's recommendations. Kansas objects to the Special Master's recommendations that this Court: (1) dismiss the Trinidad Reservoir claim; (2) reject, as unproved, the Winter Water Storage Program claim; and (3) reject Kansas's preferred method for determining usable depletions. Kan. Excepts. 1-3. Colorado objects to the Special Master's recommendations that this Court: (1) reject Colorado's laches defenses, which are based on the asserted delay by Kansas in presenting its groundwater

pumping claim; (2) set Colorado's pre-Compact groundwater pumping level at 15,000 acre-feet per year; (3) decline to treat the increases in Stateline flow produced by post-1980 alterations in John Martin Reservoir operations as offsets to the well-pumping depletions; and (4) apply the "preponderance of the evidence" standard to Kansas's proof of Compact violations. Colo. Excepts. 1-4.

With respect to the exceptions filed by Kansas, the United States is in substantial agreement with the Special Master's recommendations. The first exception, which challenges the Special Master's recommendation that this Court dismiss the Trinidad Reservoir claim, is unsound as a matter of law. The Special Master correctly concluded that Kansas had failed to establish that Colorado's accounting practices at Trinidad Reservoir had violated Article IV-D of the Compact, which prohibits new developments on the river system that cause a material depletion of the Stateline flows. He properly rejected Kansas's contention that a violation of the Trinidad Reservoir's operating principles is, in itself, a per se violation of the Compact. Although the Special Master recommends against allowing Kansas to enforce the operating principles through this action, which Kansas brought expressly to enforce the Compact, he has left open the possibility of other remedies if Colorado departs from those principles in the future.

Kansas's second exception, which asks the Court to reject the Special Master's determination that Kansas failed to prove its Winter Water Storage Program claim, is unpersuasive in light of the Special Master's extensive discussion of his reasons for his conclusion. Kansas is wrong in contending that the Special Master erred in placing the risk of uncertainty resulting from lack of data on Kansas. Kansas, as the plaintiff, has the burden

of proving its claims. The Special Master properly found, based upon a thorough examination of the evidence, that Kansas had failed to prove that Colorado's conduct had caused the injury that Kansas alleged. Kansas's contention that the Special Master based his decision on an incomplete record of accretions rests on a misreading of the Special Master's decision.

Kansas's third exception, which asks the Court to reject the Special Master's method for calculating "usable depletions," is without merit. At trial, Kansas presented three different methods for performing that calculation. The Special Master thoroughly reviewed each of those methods and properly concluded that Kansas's "Durbin approach, using Larson's coefficients, is the best of the several methods presented for determining usable flows." 2 Rep. 305. Kansas's objection to the Special Master's reliance on that method overlooks the defects in the "daily flow" method that Kansas favors.

With respect to the exceptions filed by Colorado, the United States did not participate in the proceedings concerning groundwater development in Colorado and does not take a position on the specific merits of Colorado's exceptions. We are in general agreement with Colorado's legal position that the Court's rationale for applying a heightened standard of proof in equitable apportionment actions, *Colorado* v. *New Mexico*, 467 U.S. 310 (1984), would appear to apply in this Compact enforcement action. On the facts of this case, however, the Special Master concluded that Kansas had proved that Colorado's groundwater pumping violated the Compact regardless of the standard of proof applied. We also agree with Colorado that, as a general matter, this Court may recognize laches as an equitable defense in a

Compact enforcement action. It does not necessarily follow, however, that Colorado has established that defense here.

ARGUMENT

A. THE SPECIAL MASTER CORRECTLY CONCLUDED THAT KANSAS FAILED TO ESTABLISH THAT COLORADO'S DEPARTURES FROM THE TRINIDAD RESERVOIR OPERATING PRINCIPLES CONSTITUTE A VIOLATION OF THE ARKANSAS RIVER COMPACT

Kansas challenges the Special Master's recommendation that this Court dismiss the Trinidad Reservoir claim and specifically contests his determination that Kansas failed to prove a violation of the Arkansas River Compact. Kan. Br. 12-26. According to Kansas, the Trinidad Reservoir operating principles were "promulgated as an official action of the Compact Administration in furtherance of its mandate to implement the Arkansas River Compact," and proof that Colorado failed to comply with the operating principles established that Colorado "violated the Arkansas River Compact." Kan. Br. 6-7, 14. See 3 Rep. 408. The Special Master correctly rejected that contention. 3 Rep. 412-433.

As the Special Master recognized, this Court granted Kansas leave to file a complaint based on allegations that Colorado had committed a "breach of the Arkansas River Compact." First Amended Compl. para. 16 (Rep. App. 25). He therefore evaluated Kansas's claims in light of the rights conferred by that interstate agreement. As the Special Master explained, Article IV-D of the Arkansas River Compact specifically states that "[t]his Compact is not intended to impede or prevent future development of the Arkansas River basin" through construction of

new reservoirs, such as Trinidad Reservoir. The only limitation is contained in the proviso to Article IV-D that "the waters of the Arkansas River" may not thereby be "materially depleted in usable quantity or availability for use to the water users in Colorado and Kansas under this Compact" (Rep. App. 5). See 3 Rep. 424. The Special Master accordingly concluded that to establish a Compact violation, Kansas had to show that the Trinidad Reservoir operations caused a "material depletion" of usable flow at the Stateline compared to what the Stateline flows would have been without the Trinidad Project. 3 Rep. 424-425. That conclusion rests on a straightforward interpretation of the plain language of Article IV-D. See Rep. App. 5.

Kansas nevertheless suggests that the Arkansas River Compact can also be effectively "violated" through conduct that is inconsistent with the Compact Administration's actions. Kan. Br. 6-7, 14. Specifically, Kansas notes that prior to completion of the Trinidad Project, the Compact Administration approved a document containing the Trinidad Reservoir operating principles. Kan. Br. 12-15; Kan. Br. App. A51. See 3 Rep. 412-424. Kansas contends that the Compact Administration's approval of the operating principles "set procedures for operation of Trinidad Reservoir necessary to comply with the Compact" and that a violation of the operating principles should therefore be treated as a violation of the Compact itself. See Kan. Br. 15; 3 Rep. 408.

Kansas can point to nothing in the Compact, however, that provides Kansas with a right to challenge upstream reservoir operations in the absence of a "material" depletion. See 3 Rep. 424-426. Kansas cannot overcome that omission by relying on the Compact Administration's approval of the Trinidad Reservoir operating

principles. The Compact does not empower the Compact Administration to amend the Compact to create a new enforceable right or a new cause of action under the Compact; nor, to our knowledge, has the Compact Administration asserted such a power. See 3 Rep. 416. Indeed, Kansas concedes that point. See Kan. Br. 25 ("An interstate compact adopted under [the Compact Clause] cannot be changed by the interstate agency created by the compact.").

To be sure, the Compact authorizes the Compact Administration to promulgate "rules and regulations consistent with the provisions of this Compact." Compact Art. VIII-B(1) (Rep. App. 11). That Article, however, does not authorize the Compact Administration to accomplish what Kansas attributes to it in approving the operating principles. Article IV-D states that "[t]his Compact"—which includes Article VIII-B, on which Kansas relies—"is not intended to impede or prevent future development" (such as the Trinidad Project) unless the usable Stateline flow is "materially depleted" as a result. Furthermore, Article VIII-B itself allows the Compact Administration to adopt only such rules and regulations as are "consistent with this Compact"; it therefore does not authorize the Administration to adopt rules that impose enforceable standards for establishing a violation of the Compact that differ from the one ("material depletion") set forth in Article IV-D of the Compact itself. But even if the Court construed the Kansas complaint to allege a violation of a Compact rule, and additionally concluded that a State may seek judicial enforcement of such rules, Kansas's claim would still founder. The operating principles at issue here "clearly were not rules of the Compact Administration in any normal sense." 3 Rep. 414. The

Special Master "carefully examined the record presented here of the Compact Administration's consideration of the Trinidad Project," and he found "nothing to indicate that the Compact representatives of either State thought they were exercising binding authority under Article VIII-B." 3 Rep. 415. See 3 Rep. 417-418 & n.8.[7]

Kansas also attempts to overcome that problem through reliance on this Court's decision in *Texas* v. *New Mexico*, 462 U.S. 554 (1983). Kan. Br. 15-19. That case presented a dispute under the Pecos River Compact, Act of June 9, 1949, ch. 184, 63 Stat. 159, which is administered by the Pecos River Commission. New Mexico contended, among other things,

> that this Court may do nothing more than review official actions of the Pecos River Commission, on the deferential model of judicial review of administrative action by a federal agency, and that this case should be dismissed if we find either that there is no Commission action to review or that the actions the Commission has taken were not arbitrary or capricious.

462 U.S. at 566-567. The Court rejected New Mexico's contention, explaining that the Court's original

---

[7] Kansas takes issue with the Special Master's conclusion on that point. Kan. Br. 20-22. As the Special Master explained, however, the Compact Administration's approval of the operating principles did not follow the notice and publication requirements established in the Administration's by-laws for adopting rules and regulations. 3 Rep. 413. The fact that the operating principles are expressed in "mandatory" language (Kan. Br. 20, 22) does not transform them into rules formally adopted by the Commission, much less ones that are enforceable in the same manner as the Compact itself. Cf. *United States* v. *Montalvo-Murillo*, 495 U.S. 711, 717-719 (1990).

jurisdiction "extends to a suit by one State to enforce its compact with another State or to declare rights under a compact," *id.* at 567, and that "the mere existence of a compact does not foreclose the possibility that [the Court] will be required to resolve a dispute between the compacting States," *id.* at 568. The Court additionally noted that New Mexico's theory was "untenable" because it "is not the proper function of our original jurisdiction" to conduct "judicial review" of the Pecos River Commission's actions. *Id.* at 570. The Court stated:

> If authorized representatives of the compacting States have reached an agreement within the scope of their congressionally ratified powers, recourse to this Court when one State has second thoughts is hardly "necessary for the State's protection."

Id. at 570-571.

Kansas contends that the *Texas* v. *New Mexico* decision requires this Court to enforce the Trinidad operating principles against Colorado, because the Arkansas River Compact Administration approved those principles and Colorado has no need for "recourse to this Court." Kan. Br. 19. That reasoning is unsound. The issue in *Texas* v. *New Mexico* was whether the Court should engage in judicial review of Compact Commission actions. That issue is not present here. No one has asked this Court to review a Compact Administration decision. The issue instead is whether Kansas may prove a "breach of the Arkansas River Compact" (Rep. App. 25) based on conduct that the Compact itself does

not forbid. The Special Master correctly concluded that Kansas may not do so. 3 Rep. 426.[8]

B. THE SPECIAL MASTER CORRECTLY CONCLUDED THAT KANSAS FAILED TO PROVE THAT THE WINTER WATER STORAGE PROGRAM VIOLATES THE COMPACT

Kansas contends that the Special Master erred in finding that Kansas failed to prove its claim under Article IV-D of the Compact that the WWSP had "materially depleted" Stateline flows. Kan. Br. 26-34. Kansas contends that the Special Master improperly placed the burden of proof on Kansas, erred in his

---

[8] The Special Master was careful to indicate that he was rejecting Kansas's Trinidad claim based on the State's theory at trial that Colorado's violation of the reservoir operating principles "*per se* constituted a Compact violation." 3 Rep. 408. He expressly reserved the question that Kansas has not raised in this proceeding—namely, "whether Kansas has a claim for violation of the Operating Principles that is independent of the Compact." 3 Rep. 408 n.6. As the Special Master noted, Colorado has discontinued the practices that precipitated Kansas's claims. 3 Rep. 406 & n.5. If new violations of the operating principles should occur, Kansas would not be foreclosed by the Special Master's recommendation from seeking equitable relief under some other theory in an appropriate forum. Kansas conceivably might even seek to invoke this Court's original jurisdiction to address the issue, *Texas* v. *New Mexico*, 462 U.S. at 567-568, although that course might give rise to questions regarding satisfaction of the usual prerequisites for an original action (*e.g.*, a show of substantial injury) and whether an original action could appropriately be based on criteria other than the Compact's "material depletion" standard. But whatever the answer to those questions, Kansas cannot seek to enforce the operating principles on the theory that it is enforcing the Compact. Cf. *Nebraska* v. *Wyoming*, 113 S. Ct. 1689, 1694-1695 (1993) (distinguishing suits for "enforcement" of a decree from suits seeking recognition of "new rights").

analysis with respect to the "uncertain" nature of the Kansas claims and the effect of accretions on depletions, and failed to give Kansas a full opportunity to prove its case. Kan. Br. 28-34. Those claims are without merit. 2 Rep. 335.[9]

The Special Master properly recognized at the outset of his report that "Kansas, as plaintiff, must prove its case." 1 Rep. 65. Kansas attempted to meet its burden by constructing a hydrologic model of the river system in Colorado and comparing the results of two model simulations, one designed to simulate Stateline flows with no WWSP, the other designed to simulate flows with the WWSP in effect. 2 Rep. 326.[10] See generally 2 Rep. 228-263 (describing the Kansas model). The Special Master reviewed the many errors uncovered in the model simulations, the many changes that Kansas itself made to the quantification of its claim, and the many criticisms of the model's accuracy. 2 Rep. 314-335. Based upon that record, the Master concluded that Kansas had not proved its WWSP claim. 2 Rep. 335.

---

[9] Although the Federal Rules of Civil Procedure may be "taken as a guide to procedure in an original action in this Court," Sup. Ct. R. 17.2, and they provide that a Master's factual findings in a non-jury action should be accepted unless clearly erroneous, Fed. R. Civ. P. 53(e)(2), this Court has explicitly departed from that practice and instead conducts an "independent review of the record." *Colorado* v. *New Mexico*, 467 U.S. 310, 317 (1984). The Court has stated that "[t]hough the Master's findings * * * deserve respect and a tacit presumption of correctness, the ultimate responsibility for deciding what are correct findings of fact remains with [the Court]." *Id.* at 317. See also *Mississippi* v. *Arkansas*, 415 U.S. 289, 291-292, 294 (1974).

[10] As the Special Master noted, Kansas modeled "two hypothetical situations without a common base. Kansas did not model the real WWSP, as it has been operating." 2 Rep. 325.

In the face of that failure, Kansas argues that the Special Master should not have placed on it the burden of proof. Kan. Br. 28-32. There is, however, nothing unusual or unfair in placing the burden of proof on Kansas in this case. See 1 Rep. 65-70. Prior to the ratification of the Arkansas River Compact, Kansas clearly had the burden of proving injuries from upstream developments. See *Colorado* v. *Kansas*, 320 U.S. 383, 391-392 (1943); *Kansas* v. *Colorado*, 206 U.S. 46, 114-117 (1907); see also *Colorado* v. *New Mexico*, 459 U.S. 176, 187 n.13 (1982) ("Our cases establish that a State seeking to prevent or enjoin a diversion by another State bears the burden of proving that the diversion will cause it 'real or substantial injury or damage.'"). The Compact adopted a specific standard for establishing injury, and Kansas is now entitled to obtain relief under the Compact upon a showing that usable Stateline flows are "materially depleted." Art. IV-D (Rep. App. 5). The Compact, however, did not address the burden of proof, and it is therefore reasonable to continue to place that burden on Kansas. Cf. *Green* v. *Bock Laundry Mach. Co.*, 490 U.S. 504, 521 (1989) ("A party contending that legislative action changed settled law has the burden of showing that the legislature intended such a change.").[11]

---

[11] It may be that the Compact's "material depletion" standard imposes a difficult evidentiary burden on the downstream State. See Kan. Br. 28-30. Nevertheless, Kansas agreed to that standard, and this Court should be reluctant to interfere with the agreement that was struck. Contrary to Kansas's suggestion (Kan. Br. 30), it would be counter-productive to the encouragement of interstate compacts if Kansas could now insist that the practical burdens of proving a violation under the negotiated standard warrant a shifting of the burden of proof. See *Texas* v. *New Mexico*, 462 U.S. at 567-568 ("If there is a compact, * * * our first and last order of business is interpreting the compact.").

Contrary to Kansas's assertions, the Special Master did not reject Kansas's claim simply because is was "uncertain" (Kan. Br. 26, 28, 32); rather, he rejected the claim because it was so "uncertain" as to be unproved. The Special Master conducted a thorough analysis of Kansas's evidence of its WWSP claim and concluded that "Kansas has not proved that the WWSP has caused material Stateline depletions." 2 Rep. 335. Indeed, he found numerous problems with Kansas's evidentiary presentation. For example, he noted that there were significant errors in comparing Kansas's model results with actual Stateline flows.[12] The Special Master was also troubled by the facts that the Kansas model did not take into account "winter storage in John Martin Reservoir," 2 Rep. 326, that it "overpredicts" stored water by 141,500 acre-feet, 2 Rep. 327, and that it did not accurately account for evaporative losses resulting from winter irrigation, 2 Rep. 329-335. The Special Master also observed that "Kansas' case has not been helped by its own contradictions in quantifying impacts to usable flows." 2 Rep. 335. The fact that Kansas provided the

[12] The Special Master pointed out that the State's modeling results for six of the ten years it analyzed either over-predicted or under-predicted observed Stateline flows by more than 30 percent. In the three years in which the error was less than 10 percent, the average error still amounted to 12,251 acre-feet per year. 2 Rep. 322-324. The Special Master contrasted those large errors to the much smaller WWSP depletions calculated by Kansas's model, which amounted to either 4739 acre-feet per year, or 1538 acre-feet per year, depending on the method selected for showing depletions. 2 Rep. 323-324. He found similar problems with Kansas's calculation of depletions on a monthly basis. 2 Rep. 324.

"best estimate" that it could make (Kan. Br. 32) does not excuse its failure of proof.[13]

There is no merit to Kansas's specific contention that the Special Master improperly based his decision to reject its WWSP claim "on the proposition that if accretions were taken into account, then depletions would be essentially eliminated." Kan. Br. 33. The issue of accretions was simply one of the many problems that the Special Master identified in Kansas's proof. He correctly observed that factoring in projected WWSP accretions—by which he meant the increases in flow predicted by the Kansas model (2 Rep. 328)—would "essentially" eliminate Kansas's projected WWSP depletions. See 2 Rep. 327-329, 335. But that considera-

[13] The Special Master rejected Kansas's argument that "[c]ommon sense leads to the conclusion" (Kan. Br. 27) that the WWSP causes Stateline depletions, recognizing that the "issue is much more complex than first appears." 2 Rep. 329. He also recognized that a number of other studies had reached conclusions contrary to those of Kansas. 2 Rep. 313-318. The Special Master discussed studies performed by the United States Geological Survey (USGS) for the period from 1967 to 1979 showing that the WWSP had not reduced in-flow to John Martin Reservoir. 2 Rep. 313. He also discussed a USGS computer model that studied the 1972 to 1974 period and predicted that a winter storage program would increase Stateline flows, 2 Rep. 313, and he cited a study by Kansas's own Division of Water Resources, which concluded there had not been a "reduced flow at the Las Animas gage . . . since operation of Pueblo Reservoir began." 2 Rep. 313. In addition, the Special Master rejected Kansas's contention that Colorado's model proved depletions. 2 Rep. 316, 318. The Special Master noted that Colorado's model indicated total depletions over a 27-year period, at an average of 354 acre-feet per year, but did not translate those depletions to reductions in usable flows. He also noted that Colorado's expert testified that the WWSP had resulted in "no discernible impact" on Stateline flows. 2 Rep. 316.

tion was not a significant basis for his decision. See 2 Rep. 314-335.

Furthermore, Kansas is wrong in suggesting that the Special Master treated the issue of accretions inconsistently in different parts of the case. See Kan. Br. 33-34. Kansas contends that because the Special Master did not take into account accretions in finding Colorado liable on Kansas's groundwater pumping claim, he should not have relied on accretions in rejecting Kansas's WWSP claim. There is, however, no inconsistency in the Special Master's rulings. The Special Master found that Kansas had proved liability with respect to groundwater pumping despite the problems he detected on the issue of accretions.[14] By contrast, the Special Master found that Kansas had failed to establish liability for the WWSP claim because of numerous problems in its proof, including Kansas's failure to account for the fact that the WWSP could actually increase the Stateline flows under certain conditions. 2 Rep. 327-329. The Special Master properly concluded that while further evidence on accretions would be needed to determine the specific remedy for Colorado's groundwater pumping violations, the failure of Kansas's evidence on the WWSP claim was so clear that the claim should be denied.

Kansas's general argument (Kan. Br. 34) that the Special Master failed to allow "full development" of the

---

[14] The Special Master specifically stated that he had "no difficulty in concluding that postcompact pumping in Colorado has caused material depletions of the usable Stateline flows." 2 Rep. 263. He nevertheless concluded that the issue of accretions—which in that context referred to increases in Stateline flows resulting from stored water releases and groundwater pumping (2 Rep. 261)—"needs to be examined" to determine the proper remedy. 2 Rep. 263.

facts is entirely without merit. The Special Master gave Kansas every reasonable opportunity to prove its case. He continually allowed Kansas to change its exhibits and analysis during the course of the case, and he also permitted Kansas a recess lasting for a year to correct errors in its evidence and prepare new experts. See, *e.g.*, Rep. App. 82-95. Notwithstanding the Special Master's extraordinary forbearance, Kansas failed to meet its burden. The Special Master's rejection of Kansas's WWSP claim was correct in light of all of the defects he found in Kansas's presentation.

C. THE SPECIAL MASTER SELECTED AN APPROPRIATE METHOD FOR CALCULATING USABLE DEPLETIONS

Kansas also challenges the Special Master's method for calculating what portion of the depletions that Kansas has projected are in fact "usable" depletions. Kan. Br. 35-44. As we have explained, Article IV-D of the Arkansas River Compact prohibits material depletion of water "in usable quantity or availability for use to the water users in Colorado and Kansas." Rep. App. 5. Kansas was therefore obligated to prove that the depletions it alleged—whether based on Colorado's groundwater pumping or the WWSP—deprived Kansas of water at a time when the water could have been utilized by downstream users. See 2 Rep. 291-292. The Special Master considered the methods that Kansas had offered for estimating what portion of total depletions were usable depletions and selected the most appropriate method from among the available options. 2 Rep. 291-305. Kansas's objections to the Special Master's choice are unpersuasive.

Kansas presented three different estimation methods at trial. The first method, which was developed by the

original Kansas expert, Timothy Durbin, used the Kansas hydrologic model to calculate seasonal average flows, and then applied a percentage reduction, using coefficients based on Kansas's seasonal average historic diversions. 2 Rep. 293-294. On that basis, Durbin estimated that approximately "78% of the Stateline flows during the summer were diverted" and approximately "24% of the winter flow was diverted." 2 Rep. 293-294. The second approach, developed by a Kansas "replacement" expert, Stephen Larson, utilized the same basic methodology. Larson, however, made corrections to Durbin's calculations and "modified Durbin's coefficients, using 72% for the summer irrigation months and 25% for the winter months." 2 Rep. 294-296.

The third method, developed by another Kansas "replacement" expert, Brent Spronk, represented a sharp departure from the Durbin and Larson approaches. He did not rely on Kansas's average historic water use. Instead, Spronk attempted to determine the "percentage of days in each month when flows were being fully used in Kansas." 2 Rep. 301. He then utilized the Kansas hydrologic model to calculate "monthly outputs of changed Stateline flow" and applied his daily use estimates to the model's projections of monthly output. 2 Rep. 302. Spronk's approach does not provide seasonal averages, but instead estimates usable depletions on a monthly basis. Spronk's approach predicts an aggregate usable depletion of 489,000 acre-feet from groundwater pumping and the WWSP for the period from 1950 to 1985, while the Durbin analysis using the Larson coefficients predicts a usable depletion of 365,000 acre-feet for that period. 2 Rep. 303.

The Special Master properly concluded that the Durbin approach using the Larson coefficients was the

best of the three methods for calculating depletions to usable flow. He rejected the Spronk approach on the ground that it was incompatible with the Kansas hydrologic model. The Special Master explained that the Kansas hydrologic model was constructed on the basis of average data, 2 Rep. 302, 330 n.130, and it could not reliably predict "changes of Stateline flow on a monthly basis." 2 Rep. 303. Spronk's approach—which relied on the Kansas model to estimate total monthly flows—was therefore inherently unreliable. 2 Rep. 302 n.129, 303-304. The Special Master accordingly rejected the Spronk approach and instead selected a method that would be valid for use with the Kansas model projections. He properly concluded that the Durbin/Larson approach, though imperfect, was the most reasonable of the methods for computing usable depletions on the basis of the Kansas model. See 2 Rep. 305.[15]

Kansas contends that the method adopted by the Special Master is incompatible with the Compact, which, according to Kansas, "excludes the notion of averaging." Kan. Br. 28, 37-39. Kansas also relies on this Court's decision in *Colorado* v. *Kansas*, *supra*, which stated that "average annual flow[s]" are "not helpful in ascertaining the dependable supply of water usable for irrigation." 320 U.S. at 397. Those arguments, however, ignore the fact that Kansas itself has relied on average seasonal and annual flows in constructing its hydrologic model and that its model could not accurately predict "monthly" flows. See 2 Rep. 302-304 & n.130. Thus, if Kansas is correct that the Compact and this Court's decisions

---

[15] The Special Master also considered Colorado's proposed method for calculating "usable" depletions, but he found it flawed in various respects. 2 Rep. 296-300.

prohibit the use of average flows, then the Special Master should have refused to rely on Kansas's model for any purpose and should have rejected Kansas's claims in their entirety.

The Special Master was willing to give credence to Kansas's hydrologic model with respect to Kansas's groundwater pumping claim, despite the model's many problems. See 2 Rep. 228-240. But he also recognized that any approach for determining usable depletions had to be consistent with the limitations of that model. The three approaches that Kansas proposed for calculating usable depletions all required two steps: (1) a calculation of total depletions, and (2) an application of "usability" criteria. 2 Rep. 302 n.129. All three methods also relied on the Kansas model to estimate total depletions. The Spronk approach, however, required the Kansas model to do something that it was not designed to do—namely, to predict accurately the total depletions on a monthly or daily basis. See 2 Rep. 303 & n.130. The Special Master correctly concluded that he could not rely on the Kansas model to obtain that information, and he therefore properly concluded that the Spronk method should not be used. 2 Rep. 303-305.

Kansas's contention that the Special Master rejected Spronk's approach based upon "unsubstantiated criticisms" is without merit. Kan. Br. 41-44. The Special Master made a reasonable choice based on the options that Kansas presented, and his choice is firmly grounded in the evidence produced at trial. The Special Master, who became intimately familiar with Kansas's modeling methodology over the course of the trial, see 2 Rep. 228-263, found that "virtually the entire [Kansas] model is based on average data." 2 Rep. 302. Kansas offers no reason to question that finding. Although the State

disputes the Special Master's conclusion that its hydrologic model is "based on average data," it immediately concedes in an accompanying footnote that "certain components of the Kansas model" are in fact "based on averages." Kan. Br. 41 & n.25.

The Special Master credited the testimony of the Kansas expert who designed the model, Durbin, who stated that, because of the nature of the data input and the assumptions used in its construction, the model's results were reliable only on a long-term average basis. 2 Rep. 303 n.130. The Special Master also credited the testimony of Colorado's and the United States' experts, who provided persuasive documentation that the Kansas model results "were not reliable on a monthly basis." 2 Rep. 303-304. Kansas does not challenge that testimony. Instead, Kansas simply falls back on its argument that "Colorado, not Kansas, should bear the risk of the lack of adequate (non-average) data." Kan. Br. 42.

Notwithstanding Kansas's protestations, the Special Master articulated a sound basis for concluding that Spronk's approach to calculating usable depletions was flawed. The fact that the Spronk approach sometimes coincides with the Durbin/Larson approach (Kan. Br. 44) provides no basis for utilizing it. Indeed, the Special Master's finding of liability demonstrates that Kansas did not need to rely on the Spronk approach to prove that Colorado was liable on the groundwater pumping claim, and that approach does not promise a more accurate answer to the primary issue in developing a remedy—namely, the full measure of Colorado's aggregate depletions over the time period in question. The Court should accordingly accept the Special Master method for calculating usable depletions.

D. THE COURT SHOULD APPLY THE PRINCIPLES ESTABLISHED IN ITS EQUITABLE APPORTIONMENT CASES TO THE STANDARD OF PROOF AND LACHES ISSUES IN THIS CASE

Colorado has also filed a series of exceptions to the recommendations of the Special Master. Those exceptions pertain primarily to the dispute between Kansas and Colorado over Colorado's post-Compact groundwater pumping. The United States did not participate in the proceedings on the groundwater pumping issue, and we accordingly take no position on the specific merits of Colorado's exceptions. Nevertheless, we offer some general observations about the pertinent law. In our view, the legal principles that this Court has developed in the context of equitable apportionment actions provide guidance for the resolution of Colorado's claims involving the appropriate standard of proof and the application of equitable doctrines, such as laches.

This Court recently reiterated its longstanding rule in original actions that a State may obtain a decree against another State to apportion an interstate stream, or to modify a prior apportionment, only upon "proof 'by clear and convincing evidence' of 'some real and substantial injury or damage.'" *Nebraska* v. *Wyoming*, 113 S. Ct. 1689, 1695 (1993). See, *e.g.*, *Idaho ex rel. Evans* v. *Oregon*, 462 U.S. 1017, 1027 (1983); *Colorado* v. *New Mexico*, 459 U.S. 176, 187 n.13 (1982). The Court made clear, however, that if the State seeks only to enforce an existing apportionment, "the plaintiff need not show injury" (beyond a violation of the decree itself) because the decree establishes the plaintiff's right to relief. *Nebraska* v. *Wyoming*, 113 S. Ct. at 1695. See *Wyoming* v. *Colorado*, 309 U.S. 572, 581 (1940). The Court did not explicitly answer the question, however, of what

standard of proof would apply to factual disputes in a State's action to enforce a prior decree. The Court had no need to resolve that matter because the enforcement issue decided in that case, which was before the Court on motions for summary judgment, did not involve an issue of disputed material fact. See *Nebraska* v. *Wyoming*, 113 S. Ct. at 1695-1697.

This Court has left no doubt that the "clear-and-convincing" evidentiary standard applies when a State seeks to establish an equitable apportionment or to modify it in a way that would disturb the status quo, either by enjoining an existing use or by allowing a proposed diversion. See *Nebraska* v. *Wyoming*, 113 S. Ct. at 1695; *Colorado* v. *New Mexico*, 467 U.S. 310, 315-317 (1984); *Colorado* v. *New Mexico*, 459 U.S. 467 U.S. at 187 n.13. The Court explained that a "standard of proof allocates the risk of erroneous judgment between the litigants and indicates the relative importance society attaches to the ultimate decision." *Colorado* v. *New Mexico*, 467 U.S. at 315-316. It reasoned that, in the equitable apportionment context, the "clear-and-convincing" standard "is necessary to appropriately balance the unique interests involved in water rights disputes between sovereigns." *Id.* at 316. The Court further explained that the heightened standard "accommodates society's competing interests in increasing the stability of property rights and in putting resources to their most efficient uses" and reduces the risk of an erroneous decision "disrupting established uses." *Id.* at 316. See also *id.* at 320-321 ("Society's interest in minimizing erroneous decisions in equitable apportionment cases requires that hard facts, not suppositions or opinions, be the basis for interstate diversions."); *Connecticut* v. *Massachusetts*, 282 U.S. 660, 669 (1931) ("this Court will

not exert its extraordinary power to control the conduct of one State at the suit of another, unless the threatened invasion of rights is of serious magnitude and established by clear and convincing evidence").

Many of the reasons for applying the "clear and convincing" standard to actions for entry or modification of an interstate apportionment decree will also ordinarily be present in actions to enforce a decree. An enforcement action will involve the same "sovereign" States that are subject to the decree, and, if successful, will typically result in further relief. To be sure, as this Court explained in *Nebraska* v. *Wyoming*, *supra*, the State in an enforcement action does not need to show "injury" to justify relief, and may instead rely on the rights established by the decree. 113 S. Ct. at 1695. Thus, there often may be no significant factual issue to be resolved in an enforcement action. But when there is a factual issue to be resolved, the consequences of the resulting factual findings are much the same as in an initial apportionment action—the findings will potentially result in an injunction that upsets the status quo, by either allowing a proposed water use or enjoining an existing one. Society has a strong interest in "minimizing erroneous decisions" on such issues. *Colorado* v. *New Mexico*, 467 U.S. at 320-321.

Similar considerations suggest that the "clear and convincing" standard of proof should apply in this compact enforcement action. An interstate compact imposes limitations on sovereign States with respect to the use of a shared water resource. Furthermore, a compact enforcement action will often raise the concerns the Court has expressed about the need for correct factfinding. This case demonstrates that point. As we have explained, the Arkansas River Compact prohibits

the States from "materially depleting" available water, and hence an enforcement action under that Compact will usually depend on whether that prohibition was in fact violated. As the Special Master's report shows, that factual question can be technically complex, and an affirmative answer may have grave consequences for the offending State. In this context, the answer should be based on "hard facts, not suppositions or opinions." *Colorado* v. *New Mexico*, 467 U.S. at 320-321. Cf. *Alabama* v. *Arizona*, 291 U.S. 286, 292 (1934); *Connecticut* v. *Massachusetts*, 282 U.S. at 669.[16]

On the question of laches, we agree with Colorado and the Special Master that this Court may take into account traditional equitable principles, such as the doctrine of laches, when resolving an equitable claim by one State against another State in an original action. For example, in *Nebraska* v. *Wyoming*, *supra*, this Court resolved a dispute between two States over the priority date of a water storage facility by relying in part on a rationale akin to the doctrine of laches. The Court stated:

> We think the evidence from the prior [equitable apportionment] litigation supports the conclusion that the Inland Lakes' priority was settled there. And even if the issue was not previously determined,

---

[16] In this case, the Special Master elected to apply a preponderance of the evidence standard. See 1 Rep. 65-70. Nevertheless, the application of a heightened standard would not necessarily change the outcome in this case. The Special Master concluded under the preponderance standard that Kansas had proved only its ground water pumping claim, and with respect to that claim he determined that Colorado's groundwater pump[illegible] violated the Compact regardless of the standard of proof appli[illegible] 2 Rep. 263.

> we would agree with the Special Master that Wyoming's arguments are foreclosed by its postdecree acquiescence.

113 S. Ct. at 1697 (citing *Ohio* v. *Kentucky*, 410 U.S. 641, 648 (1973)). See also *Colorado* v. *Kansas*, 320 U.S. at 394. Concepts such as laches or acquiescence are applicable to actions to enforce a compact insofar as enforcement turns on equitable principles. Cf. *Texas* v. *New Mexico*, 482 U.S. 124 (1987) (enforcing a compact through the use of equitable remedies). The fact that an equitable doctrine, such as laches, may be invoked by one State against another does not, of course, answer the question whether Colorado has made out the defense of laches on the facts of this case. See 1 Rep. 147-170.

CONCLUSION

The exceptions of Kansas to the Report of the Special Master should be overruled.

Respectfully submitted.

DREW S. DAYS, III
Solicitor General

LOIS J. SCHIFFER
Assistant Attorney General

EDWIN S. KNEEDLER
Deputy Solicitor General

JEFFREY P. MINEAR
Assistant to the Solicitor General

JAMES J. DUBOIS
PATRICIA L. WEISS
Attorneys

JANUARY 1995